

ADC PROFESSIONAL SERVICES

Simplified VoIP Deployments





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Delivering Voice over Internet Protocol (VoIP) services is a promising scenario for many cable operators. Unlike circuit-switched telephony, VoIP offers new opportunities for advanced and differentiated services, such as real-time call management, integrated messaging, interactive logs and ubiquitous call notification.

While VoIP seems promising, it's also daunting. VoIP is a disruptive technology that's being fueled by a rapidly growing and highly competitive broadband market. Its success in international call traffic shows its potential for challenging existing business models. Its proliferation in both consumer and enterprise markets also shows that VoIP is inevitable.

As challenging as it seems, VoIP migration doesn't have to be difficult. Regardless of whether your challenge is maintaining quality of service, optimizing existing facilities, scaling to meet demand, circuit-to-packet migration or VoIP equipment deployment, ADC can help make carrier-class VoIP service delivery easier, faster and more reliable.

ADC offers a portfolio of products and services essential to successful VoIP implementation from the headend. We also offer the expertise and experience that can

only come from working with leading MSOs on projects ranging from a single headend to large-scale region rollouts with simultaneous rollouts in multiple markets.

ADC's VoIP solutions integrate our professional services with ADC products and products from leading vendors of VoIP gateways, hardware components, soft switches and servers, including Cisco Systems and Sonus Networks. We enable:

- Faster, easier deployments
- Increased reliability
- Improved quality
- Lower deployment costs
- Improved time to market and time to revenue

The stakes in VoIP deployment are high as the competition has set the standards for voice services. ADC offers a complete, integrated solution that takes the guesswork out of VoIP deployments while enabling carrier-class voice service to your customers.

ADC's VoIP portfolio includes professional services and solutions for:

- RF signal management
- DC power
- Fiber

Professional Services

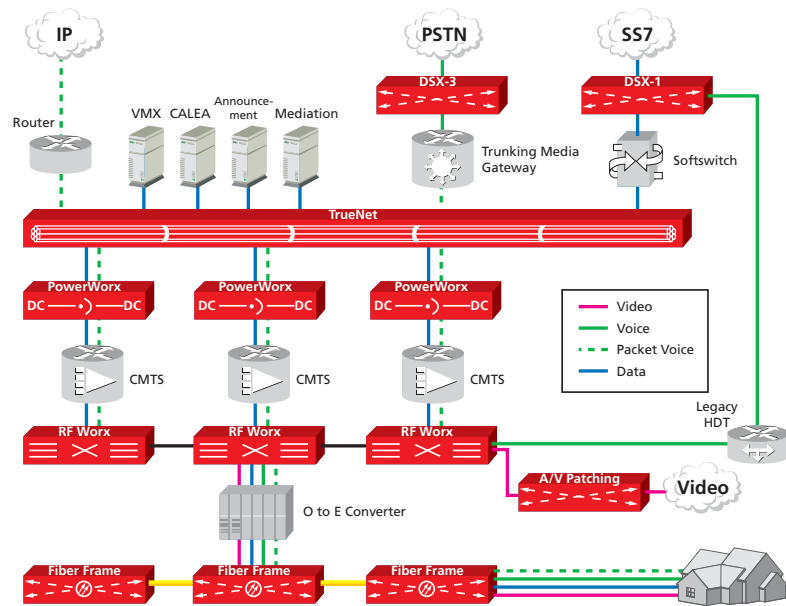
ADC offers a full range of planning, deployment and maintenance services for cable operators, as well as expertise with network equipment and elements from more than 60 manufacturers. Our Professional Services teams offer a complete assessment service to help operators determine exactly what's need for VoIP deployment, as well as engineering, furnishing and installation (EF&I); preconfiguration of rack level solutions incorporating products from leading VoIP equipment manufacturers; commissioning and integration; and decommissioning and removals to optimize the plant. We also provide turnkey program and project management to ensure a smooth process with on-time, on-budget delivery. Our multivendor, multiservice, multitechnology approach, coupled with our experience, makes ADC unique, and the choice of most leading MSOs.

RF Signal Management Solutions

ADC's RF Worx® provides carrier-class two-way RF combining, splitting, distribution and management within the headend. ADC's new RF Worx® SignalOn® series platform enables network reconfiguration and balancing without service interruption, and features patented "make-before-break" hitless attenuation technology. It also provides the highest density in the industry, and the best performance and specifications.

Other RF signal management solutions include:

- RF Worx Passive Modules
- Traditional Passive Modules
- RF Worx Forward Amplifiers
- Power-Analog Video Interface System (AVIS) Return Path Amplifiers



VoIP Network Architecture

Power

VoIP requires uninterruptible DC power to meet the demands for lifeline telephony services. Our professional services teams have extensive experience in building DC power plants for MSOs, and with power systems from manufacturers that include Emerson, Ektel, Peco II, Powec and Tyco.

ADC PowerWorx® products distribute DC power and provide protection for critical network gear. The PowerWorx Advantage Series™ platform can be configured to meet unique network powering needs, allowing selection from various input power-cable routing types, fusing options and alarm connectors. Industry-standard bullet terminal breakers or fuses can be mixed within a single panel. They offer protection levels of up to 300 Amps per bus input (600 Amps maximum per panel) and up to 125 Amps per outlet position, providing flexibility and protection for almost any network element. PowerWorx panels are independently tested and comply with the industry's highest standards, including:

- CE
- IEC
- UL
- NEBS Level 3
- Telcordia
- CSA
- NEC 2002

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Digital Cross Connect Solutions

ADC's DSX-1 and DSX-3 products ensure proper cable routing and simplify routine testing and maintenance, which contribute directly to the reliability and functionality of the network, and to controlling network costs.

Fiber Managements Systems

ADC's FiberGuide® Fiber Cable Management System is a trough system designed to protect and route fiber optical patch cords, multifiber cable assemblies and intrafacility fiber cable (IFC) to and from fiber splice enclosures, fiber distribution frames and fiber-optic terminal devices. FiberGuide is designed to ensure a two-inch minimum bend radius throughout the system.

If you're considering a VoIP deployment, turn to ADC to help you determine precisely what you need to build a flexible, scalable and highly reliable solution that delivers an immediate competitive advantage.

For more information, call your local ADC representative or ADC toll-free at 1-800-336-3891, or visit ADC on the web at www.adc.com.

About ADC Professional Services

Through its Professional Services organization, ADC helps plan, deploy and maintain telecommunications networks throughout the United States and Europe. ADC's unique experience in multivendor, multitechnology, multiservice solutions makes ADC the ideal choice for projects that require an in-depth, hands-on understanding of simple to complex network environments.

PLANNING SERVICES

- Program and Project Management
- Network and Inventory Audit
- Engineering

DEPLOYMENT SERVICES

- Program and Project Management
- Engineering
- Material Services
- Preconfigured Equipment Solutions
- Power Services
- Installation Services
- Commissioning and Integration
- Provisioning
- Decommissioning and Removals

MAINTENANCE SERVICES

- Program and Project Management
- Service Call Center and Dispatch
- Technical Assistance Center
- Scheduled Preventive Maintenance
- Emergency Corrective Maintenance
- Field Resource Support
- Circuit Provisioning
- Logistic Services
- Spares Management

ADC Professional Services offers comprehensive solutions for network operators delivering voice, video and data services over wireless, wireline and cable networks. Learn more at www.adc.com/professionalservices



Web Site: www.adc.com

From North America, Call Toll Free: 1-800-366-3891 • Outside of North America: +1-952-938-8080
Fax: +1-952-917-3237 • For a listing of ADC's global sales office locations, please refer to our web site.

ADC Telecommunications, Inc., P.O. Box 1101, Minneapolis, Minnesota USA 55440-1101
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